

NAME OF LEARNER: <i>NAAM VAN LEERDER:</i>	
CLASS: <i>KLAS:</i>	

**NATIONAL SENIOR CERTIFICATE
*NASIONALE SENIOR SERTIFIKAAT***

MATHEMATICS P2/*WISKUNDE V2*

GRADE/*GRAAD* 11

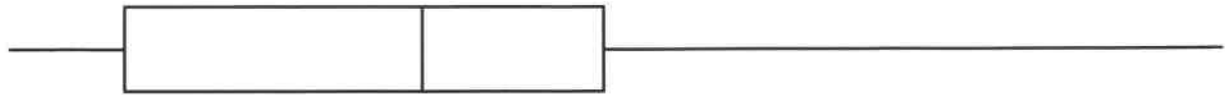
NOVEMBER 2017

<p>SPECIAL ANSWER BOOK <i>SPESIALE ANTWOORDEBOEK</i></p>

QUESTION <i>VRAAG</i>	MARK <i>PUNT</i>			INITIAL <i>PARAAF</i>	MODERATION <i>MODERERING</i>			INITIAL <i>PARAAF</i>
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
TOTAL <i>TOTAAL</i> (150)								

**This answer book consists of 24 pages.
*Hierdie antwoordeboek bestaan uit 24 bladsye.***

QUESTION/VRAAG 1



10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66

	Solution/Oplissing	Marks Punte
1.1.1		(2)
1.1.2		(1)
1.1.3		(1)

5	8	10	17	20	29	32	48	50	50	63	y	107
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1.2.1		(2)
1.2.2		(1)
1.2.3		(3)

[10]

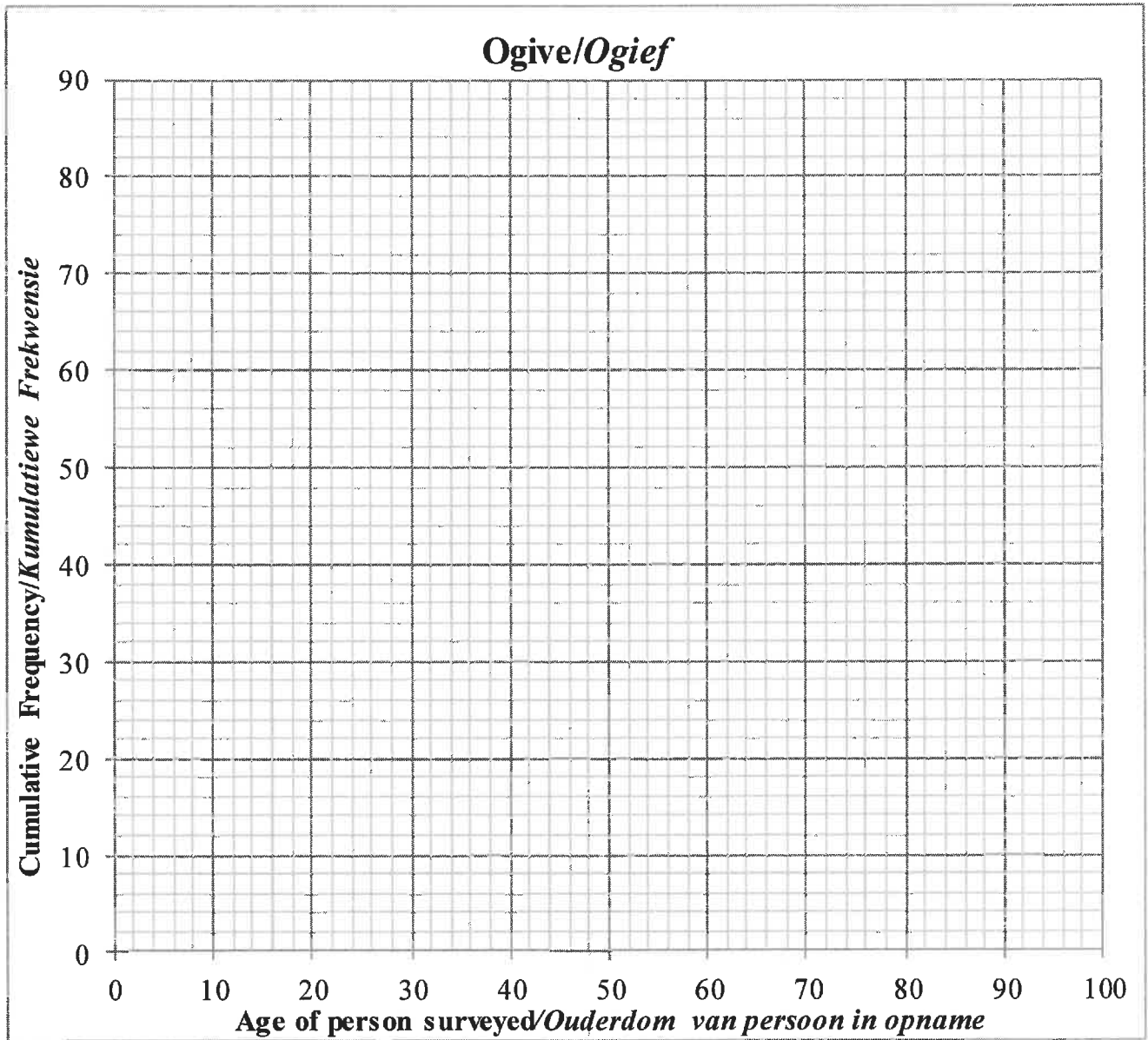
QUESTION/VRAAG 2

	Solution/Oplossing	Marks Punte																								
2.1	<table border="1"> <thead> <tr> <th>AGE OF PERSON SURVEYED /OUDERDOM VAN PERSON IN OPNAME</th> <th>FREQUENCY/ FREKWENSIE</th> <th>CUMULATIVE FREQUENCY/ KUMULATIEWE FREKWENSIE</th> </tr> </thead> <tbody> <tr> <td>$20 < x \leq 30$</td> <td>7</td> <td>7</td> </tr> <tr> <td>$30 < x \leq 40$</td> <td></td> <td>27</td> </tr> <tr> <td>$40 < x \leq 50$</td> <td>25</td> <td></td> </tr> <tr> <td>$50 < x \leq 60$</td> <td></td> <td>64</td> </tr> <tr> <td>$60 < x \leq 70$</td> <td></td> <td>72</td> </tr> <tr> <td>$70 < x \leq 80$</td> <td>4</td> <td></td> </tr> <tr> <td>$80 < x \leq 90$</td> <td></td> <td>80</td> </tr> </tbody> </table>	AGE OF PERSON SURVEYED /OUDERDOM VAN PERSON IN OPNAME	FREQUENCY/ FREKWENSIE	CUMULATIVE FREQUENCY/ KUMULATIEWE FREKWENSIE	$20 < x \leq 30$	7	7	$30 < x \leq 40$		27	$40 < x \leq 50$	25		$50 < x \leq 60$		64	$60 < x \leq 70$		72	$70 < x \leq 80$	4		$80 < x \leq 90$		80	(4)
AGE OF PERSON SURVEYED /OUDERDOM VAN PERSON IN OPNAME	FREQUENCY/ FREKWENSIE	CUMULATIVE FREQUENCY/ KUMULATIEWE FREKWENSIE																								
$20 < x \leq 30$	7	7																								
$30 < x \leq 40$		27																								
$40 < x \leq 50$	25																									
$50 < x \leq 60$		64																								
$60 < x \leq 70$		72																								
$70 < x \leq 80$	4																									
$80 < x \leq 90$		80																								
2.2		(1)																								
2.3		(1)																								

	Solution/Oplissing	Marks Punte
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2.4

(3)

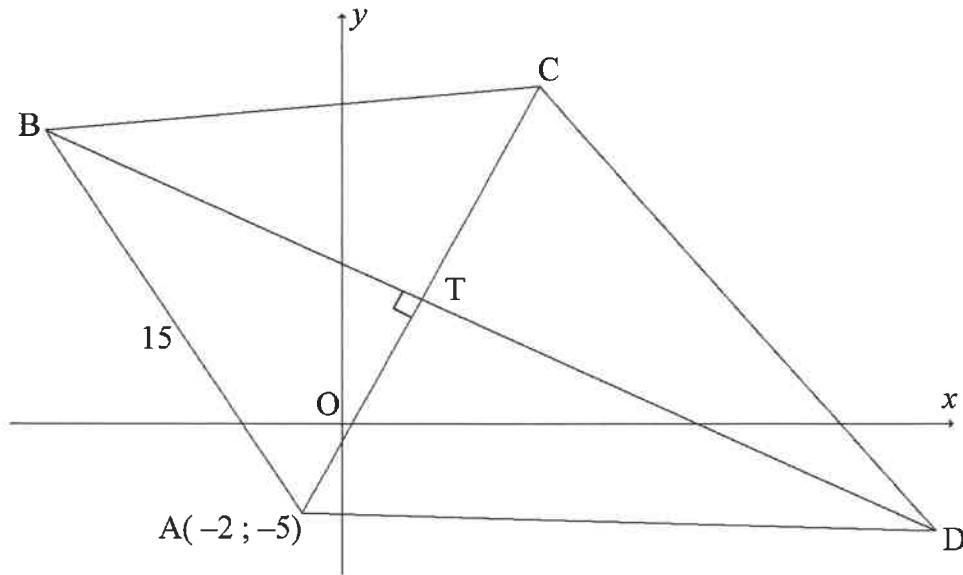


2.5		
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(3)

[12]

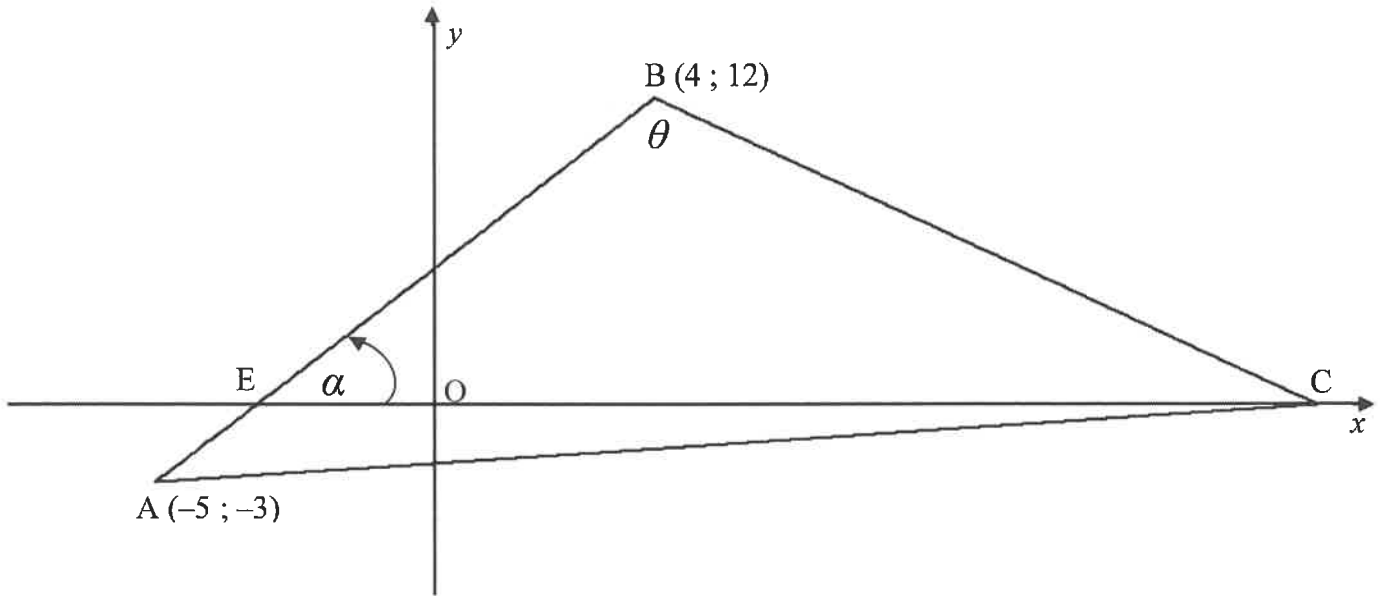
QUESTION/VRAAG 3



	Solution/Oplissing	Marks Punte
3.1		(2)
3.2		(2)

	Solution/Oplossing	Marks Punte
3.3		(3)
3.4.1		(2)
3.4.2		(4)
3.4.3		(2)
		[15]

QUESTION/VRAAG 4



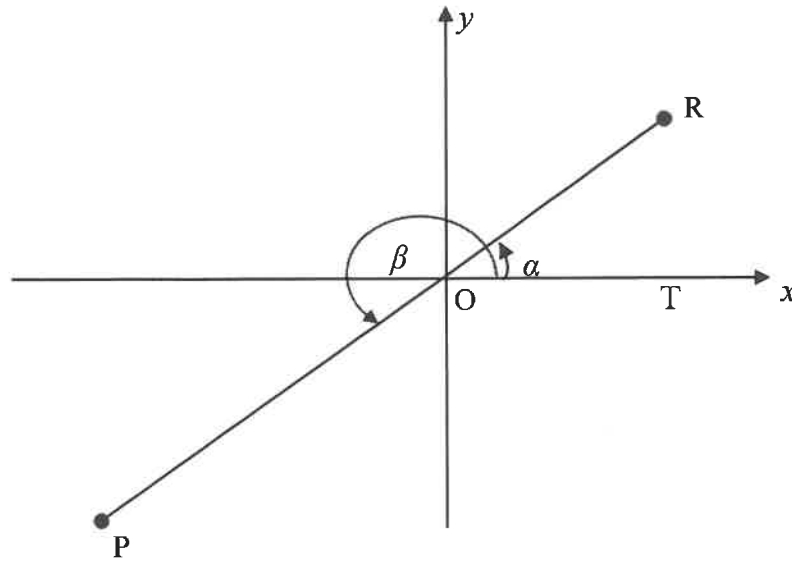
	Solution/Oplissing	Marks Punte
4.1		(2)
4.2		(3)

	Solution/Oplossing	Marks Punte
4.3		(2)
4.4		(5)
	[12]	

Additional space/Bykomende ruimte		
	Solution/Oplossing	Marks Punte

QUESTION/VRAAG 5

	Solution/Oplossing	Marks Punte
5.1		
	5.2	



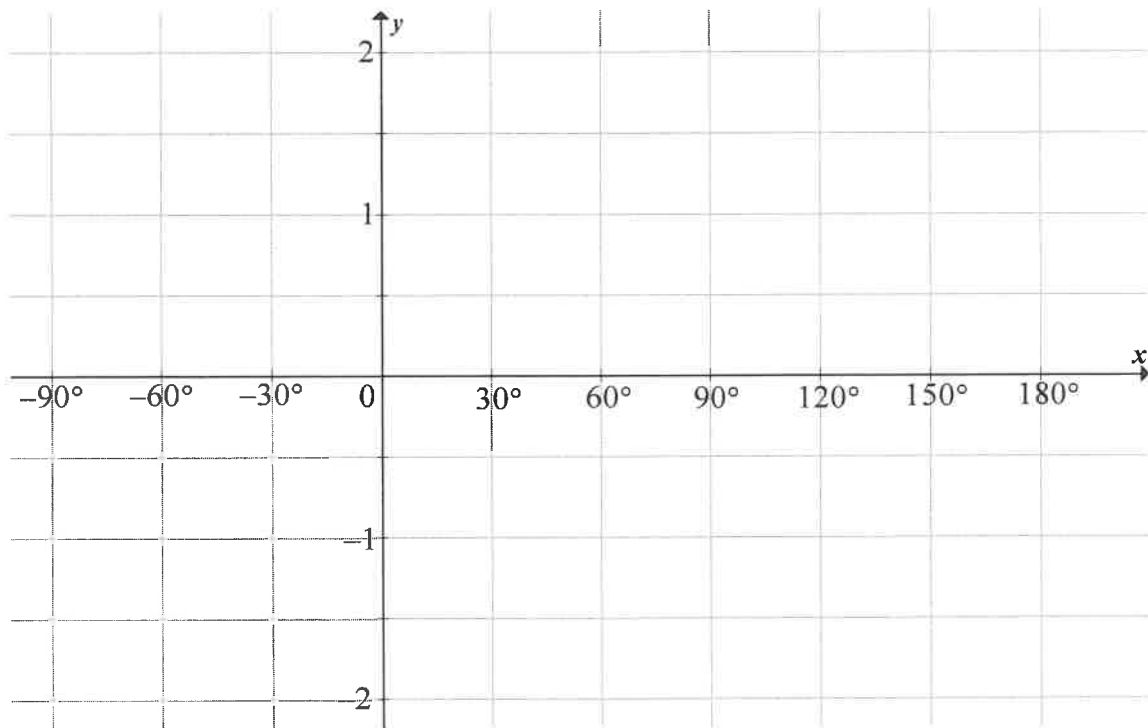
	Solution/Oplissing	Marks Punte
5.3.1		(3)
5.3.2		(3)
5.3.3		(4)

	Solution/Oplissing	Marks Punte
5.4		
		(4)
		[26]

Additional space/Bykomende ruimte		
	Solution/Oplissing	Marks Punte

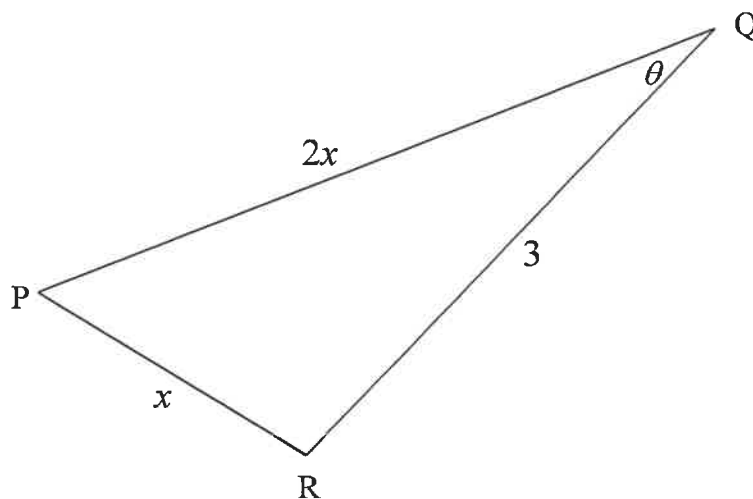
QUESTION/VRAAG 6

	Solution/Oplissing	Marks Punte
6.1		
6.2.1		(5)
6.2.2		(1)
6.2.3		(2)
6.2.3		(5)



	Solution/Oplossing	Marks Punte
6.2.4		
		(3)
		[16]

QUESTION/VRAAG 7

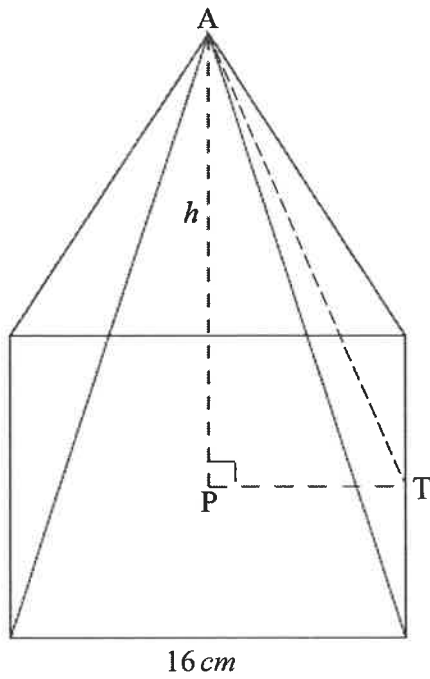


	Solution/Oplossing	Marks Punte
7.1		
		(3)
7.2.1		
		(3)

	Solution/Oplossing	Marks Punte
7.2.2		
		(2)
7.3		
		(4)
		[12]

Additional space/Bykomende ruimte		
	Solution/Oplossing	Marks Punte

QUESTION/VRAAG 8

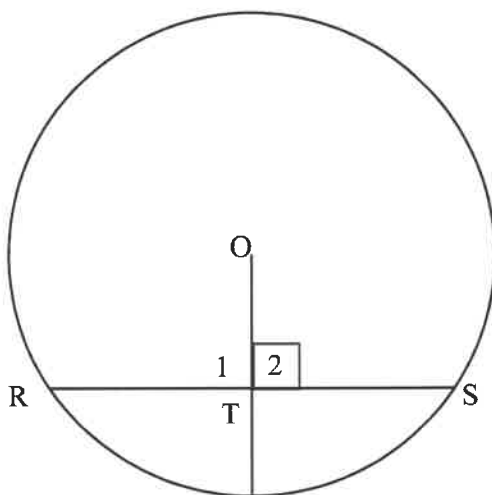


<p>Volume of pyramid = $\frac{1}{3}Ah$</p>

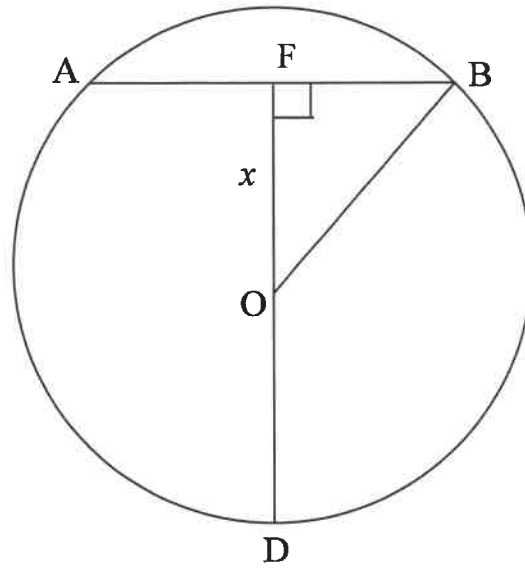
	Solution/Oplissing	Marks Punte
8.1		(2)
8.2		(4)
	[6]	

Give reasons for your statements and calculations in QUESTIONS 9, 10, 11 and 12.
Gee redes vir jou bewerings en berekeninge in VRAAG 9, 10, 11 en 12.

QUESTION/VRAAG 9

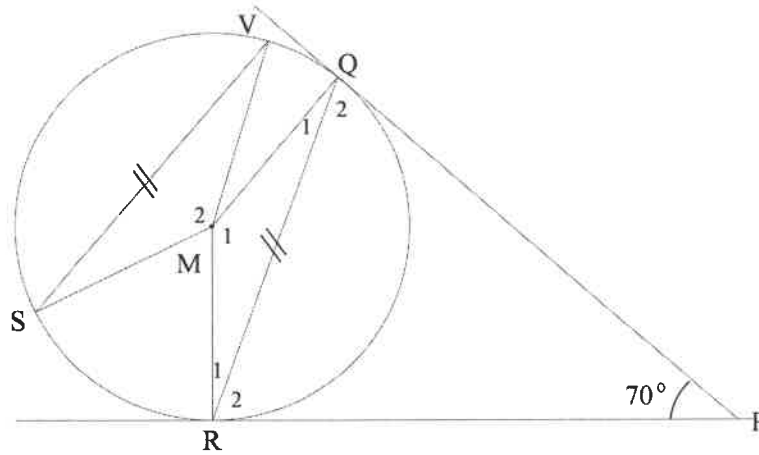


	Solution/Oplossing	Marks Punte
9.1		(5)



	Solution/Oplossing	Marks Punte
9.2		
		(5) [10]

QUESTION/VRAAG 10

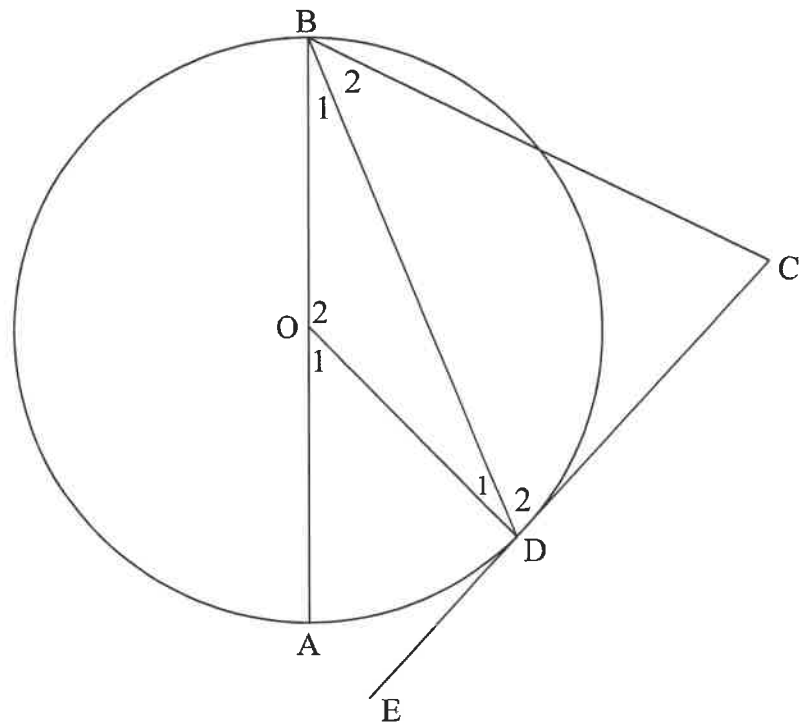


	Solution/Oplissing	Marks Punte
10.1		(4)
10.2		(2)

	Solution/Oplissing	Marks Punte
10.3		
		(3)
		[9]

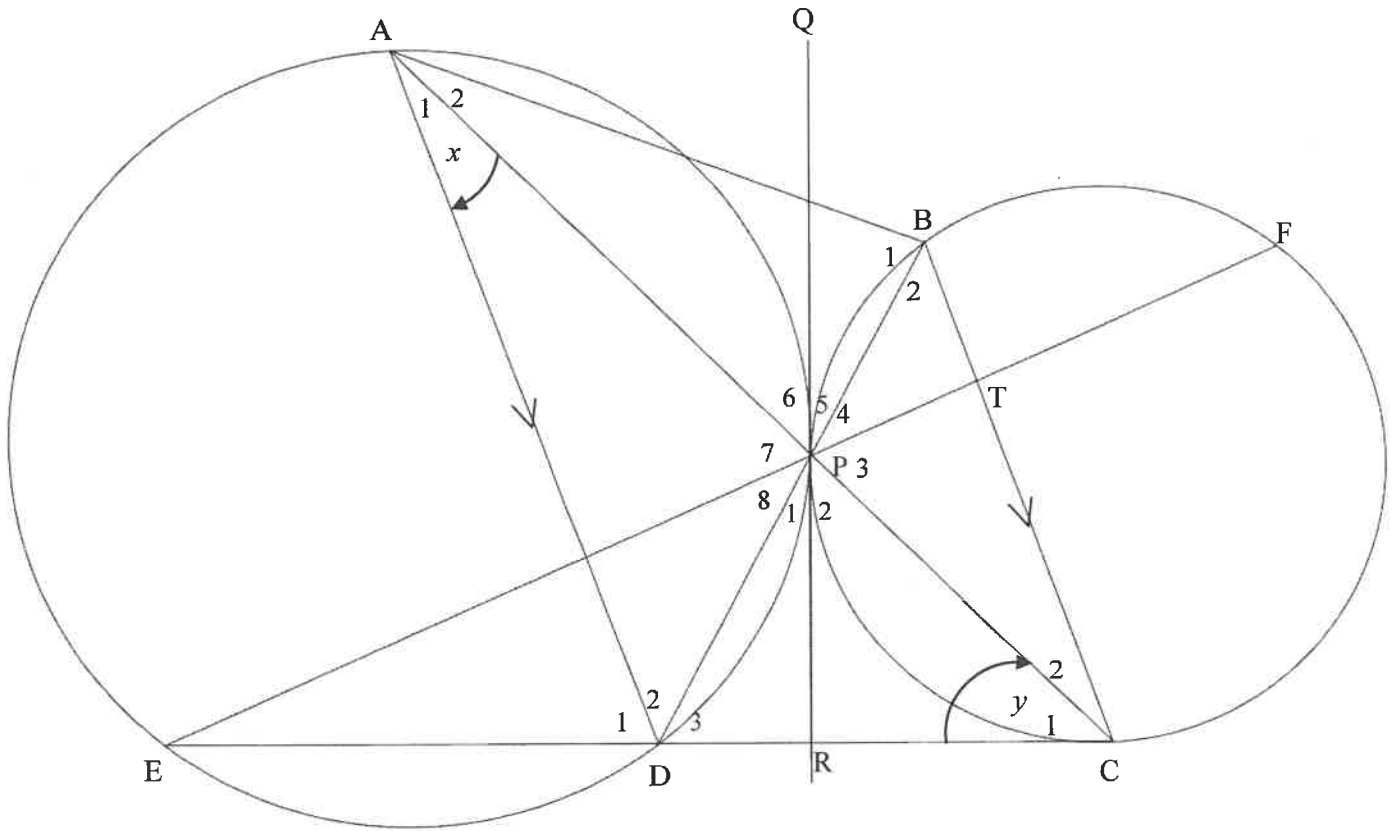
Additional Space/Bykomende Ruimte		
	Solution/Oplissing	Marks Punte

QUESTION/VRAAG 11



	Solution/Oplissing	Marks Punte
11.1		(4)
11.2		(3)
		[7]

QUESTION/VRAAG 12



	Solution/Oplossing	Marks Punte
12.1		

(7)

	Solution/Oplossing	Marks Punte
12.2		
		(4)
12.3		
		(4)
		[15]

TOTAL/TOTAAL: 150

